

carpet
maintenance
handbook

 J & J INDUSTRIES

introduction

At J&J Industries, we believe that clean carpet is important. We also think it looks better. Therefore, it is our goal through this handbook to provide information that will keep your carpet looking its best. Clean carpet can be accomplished by properly selecting the maintenance system that best meets your needs. The next step is to program the system so as to always provide great looking carpet, and at the same time, protect your carpet investment by extending not only its beauty, but its life as well.

We believe the information contained in this handbook will be greatly helpful, making carpet maintenance a seamless experience. However, it is not intended to cover every building's requirements or situation. It is therefore necessary for trained personnel to evaluate this information and implement proper maintenance procedures that work for your individual space.

As for planning your maintenance program, certain areas will require greater attention. High spillage areas, such as food service, coffee service, main entrances, elevators and traffic lanes require particular attention.

carpet selection

The appearance of carpet depends upon several factors: color, density, pattern, fiber and a viable carpet maintenance program.

color

Color selection is very important. Lighter colored carpet shows soil more readily and, therefore, requires more attention to maintain a high level of appearance. In locations where soil is dark, darker colors of carpet tend to help mask tracked-in soil. In areas where soil is red in color, a redder hue of carpet will show less soiling. However, light colored carpet is more suitable for use near shore and beach areas where sand is prevalent. Carpeting for restaurants should be bold in pattern or be a pronounced tweed. Whatever the case, carpet will look better and require less attention if the carpet color and soil color are compatible.

density

Density is important in determining how well the carpet will perform and maintain its appearance. A correctly constructed carpet for commercial use is made with the face fibers packed in tightly. The result is that most tracked in soil stays on the surface of a densely constructed carpet where it can be vacuumed away.

pattern

Carpet with a sculptured pattern will require more frequent maintenance in order for the carpet to retain its intended sculptured appearance. This should be considered at the time of carpet selection since more frequent vacuuming and pile lifting will be required in order to maintain pattern definition.

fiber

The type of fiber in the carpet should be considered. More than 90% of all carpet produced is manufactured with man-made fibers. Man-made fibers and natural fibers require different chemistry. Confirm the yarn system of your carpet before starting any cleaning procedures.

points to consider

The appropriate selection of carpet color and construction, coupled with a proper maintenance program, is the proven equation for a satisfied carpet user. The suggestions and procedures contained in this handbook are the result of extensive research. The use of all cleaning chemicals must be in accordance with proper safety practices and regulations. The suitability of products, chemicals, equipment, methods and procedures for the intended use shall be the responsibility of the user.

environmental statement

Each component of the carpet maintenance system—vacuuming, spot treatment and cleaning—must have a positive impact on environmental quality. The maintenance procedure and chemistry utilized in carpet maintenance must have low total volatile organic emissions which will dissipate rapidly. All equipment must be in proper working condition and safe for operation. The system must be capable of safely removing foreign contaminants that are brought against the carpet in normal service conditions and are compatible with the carpet's dyeing and backing types.

programmed maintenance

Clean carpet makes a statement; it looks better, therefore enhancing the appearance of your interior spaces. Proper maintenance will also extend the life of your carpets. A programmed maintenance system has proven to reduce problems. Most importantly, proper programmed maintenance promotes a healthier environment. For these reasons, an effective programmed maintenance schedule is equally as important as the initial carpet specification itself. An effective maintenance program requires both plan and execution.

Maintenance personnel are advised to:

1. Obtain a detailed floor plan of their facility.
2. Identify areas by color-coding: light, moderate and heavy soiling / traffic.
3. Use the frequency chart contained in this manual as a guideline for maintenance intervals.

main categories of programmed maintenance

There are four maintenance categories to be considered:

Preventative - this employs strategically placed walk-off mats and carpet protection

Daily - Vacuuming and spot cleaning

Interim - Dry extraction using an absorbent compound or low moisture encapsulation

Restorative - Hot water extraction and reapplication of topical carpet protection

preventative maintenance

The best place to start effective carpet maintenance is to keep as much soil as possible out of the building. This action will reduce carpet maintenance time and cost. Placement of walk-off mats at both outside and inside entrances is effective for collecting soil from shoes versus tracking the soil farther into interior surfaces. Walk-off mats are especially helpful during times of wet weather. It is also an excellent practice to use foyer matting when feasible. It is estimated that approximately 85% of contaminated soil is transferred into a space from the soles of shoes. A 15 ft. walk-off mat will remove approximately 80% of the soil before it reaches carpeted areas. Two mats for each individual area should be purchased. Contact your J&J Industries Sales Representative for info about our modular entry way system.

Rotate the mats, as necessary, for proper efficiency. Consideration for carpeting of elevator cabs is also recommended. By carpeting elevator cabs, a significant percentage of soil is transferred there rather than into other carpeted spaces. Consider elevator cabs as “Heavy Traffic” soiling areas.

daily maintenance

vacuuming

Vacuuming is among the most important and possibly the most cost efficient element of a successful maintenance program. Vacuuming can remove 80% of dry soil on a daily basis. Vacuuming should be scheduled in direct proportion to the amount of traffic and potential soil build-up in a particular area. A good practice is to frequently vacuum the areas that receive the most traffic and experience heavier soiling near entryways, lobbies, elevator cabs, and on ground floors.

High performance vacuum cleaners have a significant impact on improved air quality. At the same time, vacuums that effectively remove and contain dry particulate soil while keeping the carpet looking good will help carpet last longer. Most dry soil has razor-like edges that abrade fibers, causing light to reflect differently and giving carpet a dull appearance. Soil can damage the fibers permanently if allowed to remain in the carpet pile yarn.

vacuum equipment

For maximum effectiveness, use a vacuum cleaner that has adjustable rotating brushes that are able to loosen ground-in soil, and a strong enough airflow to penetrate to the backing, extracting all particles. The vacuum cleaner should have an enclosed high filtration bag that limits particles from recirculating into the air. Recognizing the need to identify superior cleaning equipment, the Carpet and Rug Institute introduced its Green Label Testing program for vacuum cleaners in 2000. This program tests two general categories of vacuums: (a) General purpose vacuums approved for use on all conventional carpet styles; and (b) vacuums specifically approved for use on carpet with a low pile or surface texture, measuring approximately 1/4 inch or less. Vacuum cleaners meeting the CRI requirements can be viewed at the CRI website, www.carpet-rug.com.

For best cleaning results, inspect the vacuum cleaner periodically to be sure that it is functioning properly. Keep brushes clean and check for sharp edges and foreign objects such as staples or paperclips. Replace worn brushes as needed. Keep vacuum hoses and attachments free of obstructions that restrict airflow. Always keep a spare belt

for replacement as needed. Follow the vacuum manufacturer's instructions and change the vacuum bag when it becomes more than half full. As the bag becomes full, efficiency is reduced.

spot removal

Daily removal of spots and spills is a very important phase of the overall maintenance program. The lifting of spots from the carpet will impact the aesthetics of the entire carpeted area more so than any other single maintenance factor. When possible, spots should be lifted immediately. The longer contaminants remain on the carpet fibers, the more difficult they become to remove. The key to effective spot removal is for the exercise to be correctly performed. This is achieved when 100% of the contaminant and/or cleaning agent is removed. Portable extractors are available for more efficient removal of spills. Stains differ from spots in that a stain is the result of a chemical reaction between the contaminant and the carpet face yarn. Immediate action against spots also reduces the probability of a stain. It is important to use solutions that are appropriate for the specific type spot, spill and yarn system.

step-by-step spotting procedures

Refer to the *CRI Care and Cleaning Seal of Approval Cleaning Solutions - Spot and Stain Removal Guide*. A complete current detailed listing of safe, effective carpet cleaning products can be viewed at www.carpet-rug.com.

act quickly!

Some food dyes and liquids are capable of producing permanent stains. Without fail, all spots, spills, gum and stains must be removed daily. Pretest all cleaning agents on a scrap piece of carpet or in an inconspicuous area.

liquid spills

Blot thoroughly with a white cotton towel to remove the spill. Repeat this action until the spill is fully absorbed. The key to effective spot removal is for the exercise to be correctly performed. This is achieved when 100% of the contaminant is removed.

dry spots

Gently scrape up any remaining solid material with a rounded spoon and then vacuum. The remaining contaminants are generally sticky and cling to the carpet fiber. Removal of this contaminate may require a CRI approved carpet spot remover; see listing at www.carpet-rug.com. Follow the manufacturer's recommended use of the selected cleaning products. Absorbent dry compound cleaning with Host is a proven, effective means of releasing spots and removing spills by applying Host SJ compound, agitating with a brush, and then vacuuming. Specifically, sprinkle an adequate amount of Host SJ compound onto the spots, agitate by brushing north and south, then east and west with brush strokes to cover the size of the area involved. Finish by vacuuming, which removes the compound and the soil. This system is a fast, safe, effective spot cleaner that allows the carpet to be returned to service immediately. For additional information on Host, call 800-558-9439.

Encapsulate spot cleaning with Whittaker Smart Care-Crystal Spotter or Crystal Dry utilizing low moisture crystallizing chemicals. The Crystal Spotter/Dry is sprayed onto the spots, followed by agitating with a "Carpet Roamer" brush to massage the chemical into the carpet fibers. The Crystal Dry chemistry encapsulates the contaminant that is then removed, when dry, by vacuuming. This system is also a fast and effective spot cleaner that allows the carpet to be returned to service immediately. For additional information on Whittaker, call 800-422-7686.

Wet spot cleaning can be achieved by use of lightweight portable extractors. These portable extractors assist in thoroughly removing soil, rinsing cleaning solutions and extracting wet spills. This system requires use of a CRI Seal of Approval Spot Cleaner. A cleaning solution is sprayed onto the spot, allowed a brief dwell time (approximately 10 minutes), then brushed and extracted. Carpet must be dried with fans before being returned to service. Bissell's "Little Green Machine" and similar models are available at major retail and home improvement stores.

difficult spots

Oil, grease, ink, fruit drinks, wine, plant food, urine, oven cleaner, toilet bowl cleaner, dyes, inks, drain cleaners, mildew removers, insecticides, foot powders, medicines, benzoyl peroxide, swimming pool chemicals, acids, bleaches,

etc., will require specialized cleaning processes and may damage the carpet fibers. See the CRI Care and Cleaning “Difficult Stains” at www.carpet-rug.com.

wicking factor – the spot came back

Wicking, sometimes called wick-back, is a common occurrence following spot cleaning or restoration cleaning service. This is due to an upward motion of water and cleaning solution that takes place from the base of the carpet to the top. This occurs as a result of spills, over application of cleaning solution or remaining soil (poorly-cared-for or extremely soiled carpet) that are temporarily cleaned from the top of yarn tips and as drying occurs wick or migrate back up the yarn surface. These may require a second or third cleaning to remove all contaminants and cleaning solutions.

100% Encore® SD Ultima® Nylon Fiber Difficult Spot and Stain Removal

An outstanding feature of J&J Industries’s Solution Dyed Encore SD Ultima is that the extrusion process creates fibers with locked-in color, resulting in excellent colorfastness properties. Although Encore SD Ultima can be cleaned successfully with general spot cleaning procedures, when necessary, recommended bleach solutions can be used to remove stains which might otherwise be impossible to remove with general spot cleaning techniques.

However, a word of caution is in order: **A LITTLE BLEACH GOES A LONG WAY!** Only mild solutions should be used; bleach should be diluted with **FOUR PARTS WATER** per one part household chlorine bleach (5.25-6.00% sodium hypochlorite) and this solution should be left on the carpet for only as long as it takes to remove the stain. Note: Leaving bleach on carpet for an extended period of time will cause fibers to lose strength. In extreme cases, fibers can actually break off. Removing spots and spills from 100% Encore SD Ultima carpet requires that you attend to them as soon as they occur. The longer contaminants remain, the more difficult they are to remove. Remember to use extreme caution if a 4:1 diluted bleach solution is required. These procedures should be carefully followed and only used when good spotting techniques have failed to remove the stain.

procedures (pretest every cleaning agent)

Before attempting to remove the stain, it's important to first test the spotting products to be used on a scrap piece of carpet. If no scrap is available, test an inconspicuous area. Allow the test area to dry completely, then check for any color change before proceeding. If there is a color change, do not continue. You should call 1-800-241-4586, extension 8223. Any spill that has dried (e.g., mustard or ketchup) should be removed with the use of a spotting brush and bone spatula or a spoon by scraping up the dry residue, then follow the steps listed below and dry vacuum the area. Blot up wet spills with a white absorbent cloth, a layer of white paper towels, or an absorbent compound, i.e., Host compound.

The general rule is that unless you know the origin of the stain and have determined that a wet spotter is required, you should always start with a nonflammable dry cleaning solvent (available through a janitorial supply company). Work from the outer edge of the spot toward the center to avoid enlarging the spot. Never pour any dry cleaning solvent or any other liquid cleaner directly onto the carpet, as this causes penetration into the back of the carpet which can produce buckling and deterioration of the backing system. Rather, pour a small amount of solvent on the cloth and then gently apply it to the spot. Blot the area with a dry white cotton cloth (or white paper towels). Work the spot by alternately moistening and blotting. When there is no longer any transfer of the spot substance to the cloth, allow the area to dry thoroughly. Use the pretested wet spotter in the same moisten and blot technique used with the dry solvent. If a spot or spill remains after step four, spray with the 4:1 bleach solution. Thoroughly wet the face yarn; however, be careful not to use so much liquid that it saturates the backing.

after spot cleaning

Allow to dry, generally eight hours. After the area is dry, repeat step five if the spot or spill is still evident. When the stain has been removed, completely rinse the area with tap water to remove spotting agents and bleach residue. In some carpet colors, a slight "white halo" may remain. Immediately vacuum with a wet/dry vacuum. Blot with a stack of white paper towels until moisture is absorbed.

ColorLoc® Plus

ColorLoc® Plus is a stain resistant technology from J&J Industries. This patented technology allows most stains and spills to be removed by cleaning with cold water within 24 hours.

stain resistant

The ColorLoc® Plus technology enables carpets to resist permanent staining from both acid and disperse type stains. Examples of acid type stains include coffee, sodas, tea and wine. Examples of disperse type stains include betadine, ketchup and mustard. Cleaning with water and general spot cleaning procedures reduces maintenance supply costs, as commercial cleaning agents are seldom necessary. By cleaning with water, stains and spills are removed with less time and labor, and without commercial cleaning agents. The spill or stain should be addressed immediately. The added step of rinsing or vacuuming to remove the cleaning agent residue is eliminated.

Note: Non-water based stains such as oils, salad dressings and other oil based compounds, if allowed to dry, will require the use of an approved mild detergent to emulsify the oils to prevent leaving an oily residue that may be colorless, but may cause soiling. As with any floor covering, programmed maintenance is the key to extending the life expectancy of carpet.

interim maintenance

Interim maintenance is the primary cleaning method to employ low moisture encapsulation or absorbent compound combined with pile lifting. These systems combine pile lifting and cleaning chemistries to clean and restore pile yarns while removing sticky or oily soils that hold in your carpet. The low moisture encapsulation or absorbent compound alternative is particularly attractive since they require little or no time for drying. For your information, we have listed two suppliers of recommended interim maintenance equipment and supply resources. Both have proven compatible with all J&J Industries styles and constructions.

Whittaker SmartCare Solution – Encapsulation Low-Moisture Agitation and Crystallization

800-422-7686

www.whittakersystem.com

Crystal Dry Encapsulation carpet cleaning is a practical, cost effective and efficient method of performing primary/interim carpet maintenance and pile lifting. The Crystal Encapsulation chemistry surrounds sticky, oily soils when brushed and pile lifted with the Whittaker GLS machine. Subsequent vacuuming removes the soils as particulate extraction.

Host Extraction System (Absorbent Compound)

800-558-9439

www.hostcarpetcleaning.com

Host's SJ Extraction System very effectively extracts carpet soil. The Host SJ system employs an organic extraction cleaner that is simply sprinkled over the carpet pile and then brushed through it by the Host Liberator, Freestyle or Reliant Extraction Machine. Soil and grit are attracted to and absorbed by the Host cleaner, which is then vacuumed away. The Host system is very effective in pile lifting. One of the advantages of this system is that there are no areas out of service while waiting for carpet to dry.

restorative maintenance

This carpet cleaning method is used to complement daily and interim cleaning processes by adding hot water extraction to effectively deep clean and thoroughly rinse the carpet. You will find details of deep cleaning systems and methods on CRI's website – *Care & Cleaning Seal of Approval Deep Cleaning Extractor* at www.carpet-rug.com. The CRI program tests the effectiveness of carpet cleaning equipment and certifies deep cleaning extractors that effectively remove soil without damage to the carpet.

The use of inadequate or faulty equipment, coupled with inexperienced or improperly trained technicians may often leave the carpet too wet and may not fully remove the soil and cleaning solution. This ultimately results in the carpet's

rapid resoiling as dirt and soil are attracted to residuals left behind. Below, for your information, are two suppliers of deep cleaning, hot water extraction systems. Both have been proven effective in the industry and are compatible with all J&J Industries styles.

Bane Clene – Hot Water Extraction System

800-428-9512

www.iquest.net/bane

The Bane Clene extraction method is an electric truck-mounted system that may be dismantled and brought into high-rise buildings or other buildings without any loss of efficiency. Hot water extraction injects the carpet face yarn with a cleaning solution under pressure. The solution is then immediately extracted along with the dirt and grime. When properly performed, 95% of the cleaning solution is recovered; therefore, very little moisture is left in the carpet to air dry. The cleaning solution nozzle pressure should be a maximum of 150 psi, which is gentle enough not to damage the carpet pile yarn and low enough not to inject water under carpet modules. The dry time is two to four hours. Bane Clene also has a complete line of certified cleaning solutions and trained technicians.

Chem-Dry – Hot Water Extraction with Carbonation

800-243-6379

www.chemdry.com

Chem-Dry hot water extraction with carbonation uses proprietary cleaning solutions and portable or truck mounted equipment to maximize cleaning effectiveness and achieve dry times of one to two hours — not days. Their natural cleaning solution combines safe, non-toxic ingredients copied from Mother Nature to produce carbonating bubbles, which lift dirt to the surface for extraction. The carbonating solution is applied to the carpet with low-pressure (120 psi). This prevents the moisture from entering the backing of the carpet, avoiding long dry times and reappearing stains. With a carbonation dirt-releasing agent there is no need to use soap or detergent, which can leave dirt-attracting residues on the carpet, causing rapid resoiling. The emulsified dirt is then extracted with their patented Amplified Extraction Technology to ensure clean, healthy carpets.

maintenance frequency

The two factors that dictate cleaning frequencies are the type of use, (i.e., office, school, healthcare) and the traffic classification. These two factors will dictate the frequency of maintenance procedures from vacuuming to overall cleaning. Daily vacuuming is the most important cleaning activity, but deep cleaning must be performed on stubborn or embedded soil. J&J Industries recommends that your carpet be cleaned by low moisture or absorbent compound extraction before it shows obvious soiling. Carpet should receive regular deep cleaning to maintain its good looks.

The following Frequency Chart can be used as a guideline for the maintenance procedures described in this manual. There are three levels of soiling: LIGHT, MODERATE and HEAVY. As described earlier, using a color-coded floor plan to determine the frequency requirement of the space as dictated by traffic volume will be helpful. There is no one cleaning system that fits all facility requirements. For some buildings, you may find it advantageous to use two extraction systems (truck-mounted and portable due to varying use requirements).

Level loop construction in schools and hospitals will usually require more frequent and aggressive cleaning than fine cut-pile carpet in the bank president's office. The carpet construction, color, type of soil and traffic classification all impact the carpet maintenance frequencies and extraction selection. You must, therefore, adjust your cleaning frequency as needed to maintain a clean and healthy environment. For great looking, healthy carpets – plan your carpet maintenance program, use a practical frequency schedule for guidelines, and then work your plan.

frequency chart

	traffic/soil		
	light	moderate	heavy
vacuum	1 to 3 times weekly	daily	1 to 3 times daily
spot check/clean	daily	daily	daily
pile lift interim clean	every 3 –6 months	every 3 months	monthly
restore deep clean	annually	every 6 months	every 90 days

Note: Special consideration should be exercised during cleaning or finishing of hard surface floors that transition to carpet. When special care is not exercised, the carpet can become contaminated or even damaged in these areas.

professional cleaning services and certified cleaning technicians

J&J Industries recommends professional carpet cleaning companies affiliated with the IICRC who employ trained cleaning technicians or IICRC professional certified cleaners. Carpet cleaning equipment may be purchased from our list of J&J Industries recommended suppliers. Note: IICRC is an excellent resource — www.iicrc.com or 800-835-4624.

protection

Topical carpet protection applied during the manufacturing process will become less effective after multiple cleanings and years of general foot traffic. Reapplication of a stain resistant after-market product may be applied at the owner's discretion.

do-it-yourself cleaning

(Note: Improper cleaning may void J&J Industries warranties) Do-it-yourself cleaning may be an economical choice between professional cleanings. Remember to always pre-vacuum to remove as much dry soil as possible, and follow instructions carefully!

consider the following precautions when selecting a wet cleaning method:

Remove furniture from the room before cleaning, or if impractical, place plastic film under and around the legs of chairs, tables and other furniture to prevent rust or furniture stains from developing on the carpet. Use only the recommended cleaning solution strength. Stronger than recommended solutions may cause accelerated resoiling. Rinse all detergent from the carpet to prevent accelerated resoiling.

Do not over wet the carpet. Over wetting may cause separation of the backing, separation of the seams, shrinkage, discoloration or odor. Provide proper ventilation or use fans to quickly dry the carpet and exhaust any existing solution-related fragrances. Allow the carpet to dry completely before walking on it.

Pile Setting or Grooming

Swirls, wand marks or pile distortion produced by any carpet maintenance procedure must be immediately eliminated by pile setting or grooming the carpet surface. Carpet must dry for eight hours following any maintenance procedure.

Notes: Do not wet clean any adhesive-related carpet installation for at least 30 days after installation. Do not use optical brighteners or silicone protectors on J&J Industries carpets. Flooding voids manufacturer's warranties. J&J Industries does not recommend machines that recycle water. Use fans or air movers to expedite drying, and do not allow traffic on moist carpet.

resource list

Institute of Inspection, Cleaning and Restoration Certification (IICRC)

www.IICRC.org

800-835-4624

2715 East Mill Plain Road

Vancouver, WA 98661

Carpet and Rug Institute (CRI)

Carpet Industry Trade Association-Seal of Approval listings for vacuums, cleaning agents, equipment, spotters and information.

www.carpet-rug.org

706-278-3176

P. O. Box 2048

Dalton, GA 30722-2048

Carpet Maintenance Equipment and products:

Host Dry Extraction Carpet Cleaning System Absorbent compound

www.hostcarpetcleaning.com

800-558-9439

Vacuums

See CRI Seal of Approval listing

www.carpet-rug.com.

Pile Lifter

Bane Clene | www.baneclene.com | 800-428-9512

Host | www.hostcarpetcleaning.com | 800-558-9439

Whittaker | www.whittakersystem.com | 800-422-7686

National Service Providers

Hot water Extraction

Bane Clene | www.baneclene.com | 800-428-9512

www.chem-dry.com | 800 CHEM DRY 243-6379

Low Moisture Encapsulation

Whittaker Crystal Dry | www.whittakersystem.com | 800-422-7686

National Suppliers of Equipment, Cleaning and Spotting products

Jon Don | www.jondon.com | 800-556-6366

Bane Clene | www.baneclene.com | 800-428-9512

Whittaker | www.whittakersystem.com | 800-422-7686

Closing

We believe that the information contained in this handbook is the best currently available on the subject and concurrent with the IICRC S001 Carpet Cleaning Standard and Carpet and Rug Institute's Care and Cleaning/Green Label and Seal of Approval Information.

Flooding voids manufacturer warranties.

REMEMBER: Vacuuming is among the most important and possibly the most cost efficient element of a successful maintenance program.

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